

A1
concl.
adding an atom of said first type to the atom graph in the store at a given device
when an operation is performed on the data object at said given device; and

updating the history of the data object at another device by transmitting to said other
device at least one atom that is present in the store at said given device and absent from the
store at said other device.

A2
5. (Amended) The method of claim 1 wherein said two descendant atoms
contain information that pertains to different respective versions of said data object.

6. (Amended) The method of claim 1 wherein said atom graphs further include
a second type of atom that contains information pertaining to an attribute of the data object.

A3
10. (Amended) The method of claim 1 wherein the operation on the data object
comprises a change in the contents of the data object.

A4
13. (Amended) The method of claim 1 wherein the atom graph in the store at a
given device has a cursor that identifies one atom in the graph that is associated with a
current version of the data object at that device.

A5
24. (Amended) The method of claim 1 further including the steps of generating
metadata pertaining to a data object, and applying business rules to said metadata at a store
to determine a current view of the object that is presented by an application.

A6

31. (Amended) The method of claim 1 further including the step of assigning an atom in a store to a bundle for transmission to another device during an update step.

A7

67. (Amended) The method of claim 1 wherein said updating step comprises the transmission of information pertaining to atoms from a sender store to a receiver store.

A8

77. (Amended) The method of claim 1 further including the step of encrypting information pertaining to an atom using a public-private key pair.

A9

84. (Amended) The method of claim 1 wherein each of said stores is associated with a space that pertains to a set of information, and different ones of said stores are respectively associated with different spaces.

A10

87. (Amended) The method of claim 1 wherein one store is associated with a hub device, and said updating step is carried out unidirectionally from the store at said hub device to all of the other stores.

A11

94. (Amended) The method of claim 1 wherein one store is associated with a hub device, and said updating step is carried out bidirectionally between the store at said hub device and all of the other stores.

97. (Amended) The method of claim 1 wherein stores are present at a

A12 multiplicity of devices, and a store at any device is capable of performing said updating step with a store at any other device.

109. (Amended) A method for replicating data at multiple devices, comprising the steps of:

A13 representing the history of a data object at each of first and second devices by means of a graph of atoms, where said atoms contain information pertaining to changes in the content of the data object, and said graph contains at least one parent atom having at least two descendant atoms;

adding an atom to the atom graph at said first device when a change is made to the data object at said first device; and

updating the history of the data object at a second device by forming a new graph at said second device that is a strict superset of the of the atom graph that existed at said second device prior to said updating step, and a non-strict subset of the union of the atom graphs that existed at said first and second devices prior to said updating step.

A14 113. (Amended) The method of claim 109 wherein said two descendant atoms contain information that pertains to different respective versions of said data object.
